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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/314,262	05/18/1999	STANLEY DALE VIERK	A-66435/JAS/	4944

7590 11/18/2003

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EXAMINER

RESAN, STEVAN A

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/314,262

Applicant(s)

VIERK ET AL.

Examiner

Stevan A. Resan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7,8,11-17,19,21 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7,8,11-17,19,21 and 24 is/are rejected.
- 7) ☒ Claim(s) 22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 22 August 2003 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The abstract should be revised to reflect the presently claimed subject matter.
4. Claims 1-3,5,7,8,11-17,19,21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuromiya et al US 5585989 and Gauss Electrophysics GB 1 214 340.

Kuromiya et al discloses a substrate comprising a plastic or plastic composite material exhibiting a modulus of about 350 kpsi or greater as in claims 1-2,14 (Col 6 line 56) containing damping agents (Col 4 line 63) and reinforcing agents as in claims 5,7,16,17 (Col 2 line 33-35) uniformly distributed within the plastic or plastic composite material and which is formatted in a servo pattern (as in claim 11), and having a magneto optical recording layer (as in claim 12).

Kuromiya broadly suggests the desirability that the surface of the disk is made of matrix resin alone without containing filler (as in claim 21) in order that the filler not be exposed on the surface of the disk. (Col 5 lines 45-48).

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Kuromiya et al do not disclose a separate distinct skin layer. However Gauss Electrophysics teaches the use of a laminated disk substrate having a rigid core layer and a relatively softer skin layer which has the advantage that the skin layer may be optimized to receive embossed impressions while the core remains tough and dimensionally stable. (Col 1 lines 41-Col 2 line 3; Col 2 lines 72-82).

Since Kuromiya et al teaches a core substrate which is much stronger than the acrylic or polyvinyl chloride of Gauss Electrophysics it would have been obvious to one of ordinary skill in the disk substrate art to use the substrate of Kuromiya et al in the disk of Gauss Electrophysics and alternatively it would have been obvious to one of ordinary skill in the art magnetic disk art to use a skin layer optimized to the embossing procedure of Kuromiya et al (See Col 8 lines 56-58). It would have been obvious to one of ordinary skill in the art to use a skin layer on both sides for a double sided disk wherein the servo pattern was embossed on both sides and to use a composite disk (as in claim 8) to obtain the optimum modulus and damping properties for a minimum thickness.(As is evident from the state of the art of record e.g. the Landin et al patents of record).

While Kuromiya et al teach the use of a thermoplastic norborene resin rather than a resin of claims 3,15 finding the members of a class of prior art polymers which are best suited for a particular purpose is not a patentable invention. Ex parte Fauser (POBA 1953) 128 USPQ 156.

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5. Claims 22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Applicant's arguments with respect to claims 1-3,5,7,8,11-17,19,21 and 24 have been considered but are moot in view of the new ground(s) of rejection.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ochiai US 4622261 is cited for teaching a base disk having a coating of polysiloxane.

Zou et al US 5981015 is cited for teaching a method of selecting a substrate material for a desired thickness substrate.

McCormick et al US 6069219 is cited for teaching a polymerizable coating which is applied on a surface to damp or attenuate resonant vibrations.

Kondo et al 6154442 is cited for teaching a substrate having a rigid substrate and a transparent skin (See Fig 6). A polycarbonate disk with an acrylic skin is exemplified.

Masafumi JP 05 182241 is cited for teaching a disk substrate having a skin of a damping material.

Okuda et al JP 07-188543 is cited for teaching a disk substrate polycarbonate having vibration damping properties.


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Gotoh EPO 0 227 981 is cited for teaching a recording disk having a skin layer of a lower melting point than a overcoated recording layer.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is (703) 308-4287. The examiner can normally be reached on Tues-Fri from 7:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367.

The central fax phone number is (703) 872-9306.



STEVAN A. RESAN
PRIMARY EXAMINER